Evaluation of pregnancy outcomes in women with polycystic ovary syndrome: A case-control study in Qazvin, Iran

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Abstract

Background and objective: Polycystic ovary syndrome (PCOS) is a common disorder in women of childbearing age that can be associated with adverse pregnancy complications. The aim of this study was to evaluate the adverse pregnancy outcomes in pregnant women with PCOS in Qazvin and compare it with the control group.

Methods: In this study, 150 pregnant women with PCOS aged 18-35 years with gestational age more than 20 weeks were selected as case group based on Rotterdam criteria, while 150 pregnant women without PCOS were selected as control group, and they were compared in terms of pregnancy outcomes including gestational diabetes, preeclampsia, preterm delivery, neonatal weight, and neonatal admission to the NICU.

Results: There was no significant difference between the two groups in terms of demographic information including age, weight, height and BMI. In the case group (PCOS), 33 cases (64.7%) had gestational diabetes (P=0.021), 44 cases (67.7%) had preeclampsia (P=0.002), and 70 cases (75.3%) had preterm delivery (P<0.0001), indicating a significant difference compared to the control group. The case group was higher than control group in terms of neonatal outcomes including low birth weight (40 cases, 64.5%, P=0.008) and NICU admission (30 cases, 66.7%, P=0.015).

Conclusion: The results of this study showed that with its metabolic effects, PCOS may increases the incidence of gestational diabetes, preeclampsia, preterm delivery, low birth weight or macrosomia and long term NICU admission.

Keywords: Polycystic Ovary Syndrome, Preterm delivery, Gestational diabetes, Preeclampsia, Preterm Labor